TOURING NEAR COLUMBUS

By KENNETH FRILEY, '39

'TIS SPRING and a young man's fancy turns to thoughts of romance. What, apropos, could be more romantic than the open road stretching ahead through the fresh green country-side? So come, you engineer-to-be, some warm, sunny afternoon, preferably sans classes, lay aside your hand-book, yes, even your slide-rule—just for the afternoon—and hie yourself out along the river.

Griggs Dam

Starting from, say, 15th and High, drive north on High Street, West on Lane Avenue and north on Route 31. The road follows closely the Scioto River which with its wooded banks studded here and there with a white-barked sycamore makes a pretty picture. A little over a mile up the river is the Griggs Dam, named after the consulting engineer. Built in 1905 at a total cost of $700,000 it furnished for twenty years the sole Columbus water supply reservoir. Its curved concrete spillway is 500 ft. long and there are 250-ft. approaches from each side. The dam is only 35 ft. high but forms a reservoir almost six miles long of 1,200,000,000 gallon capacity. Average width of the reservoir is 516 ft.; average depth, 14.5 ft. and it has a water surface of 363 acres. The reservoir drains an area of 1,020 square miles. On the bank, beside and above the dam an area has been made for automobiles where we can drive in and observe this distinctive structure.

Any international renown the dam may have, however, is not owing to its engineering aspects but to James Thurber's (Arts—with "17") facetious reference, in his *My Life and Hard Times,* to the report during the 1913 flood that the dam had collapsed and the water was torrenting up High Street. Despite its stimulating effects, the report proved false, and after some time most of the people were persuaded to return to their homes.

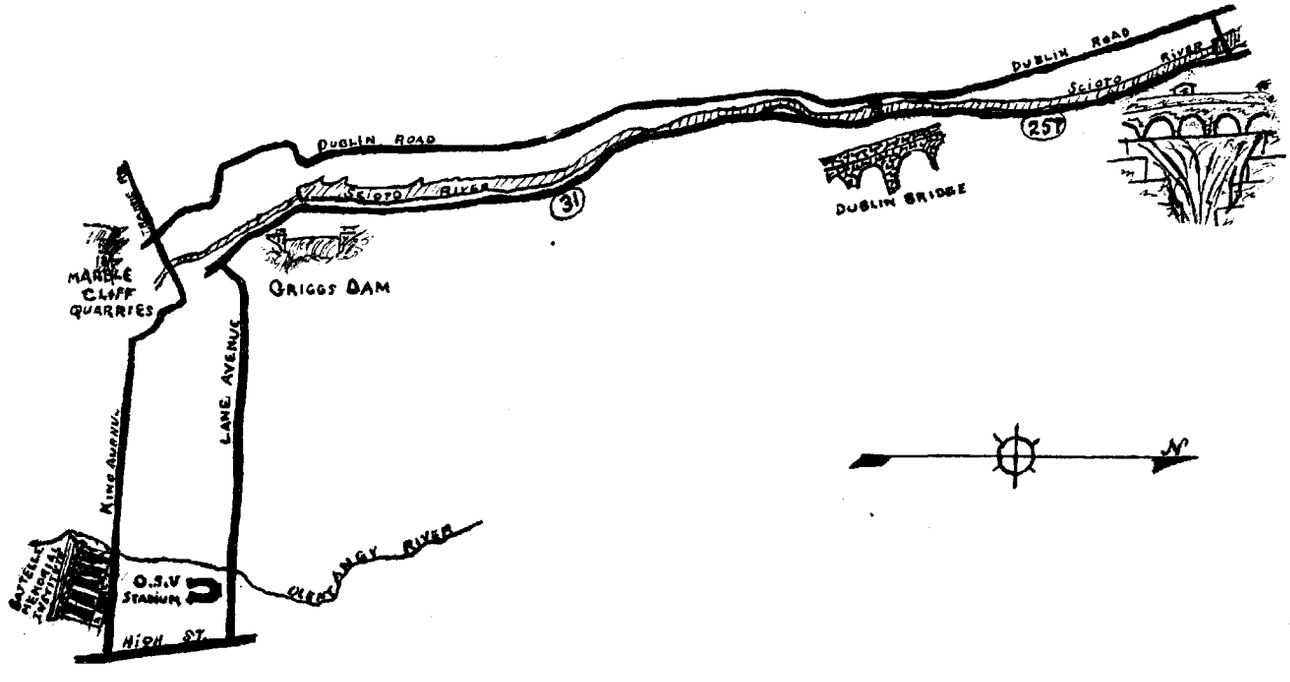
The Griggs Dam is still in excellent condition, a credit to the engineering profession.

Dublin Bridge

About six miles north on Route 31 along the river is an unusual bridge, the Dublin Bridge. It isn't symmetrical and it doesn't cling to conventions as do the other bridges around Columbus. Traffic runs under it, over it, and around it. Its design is a modified form of the clover-leaf style, a partial leaf. It is so designed to eliminate congestion of the traffic on three different routes.

Finished in January, 1936, at a cost of $198,723, the bridge is of the open spandrel arch type. There are six arched spans of various diameters ranging from 75 to 100 ft., the bridge being 50 ft. above water level. It loses its symmetry for a 1.5 per cent grade. Across its 627-ft. length is a 32-ft. wide asphalt roadway with sidewalks on each side. The bridge is constructed of reinforced concrete and is faced with local limestone.

Selecting with care the proper road from the many the bridge offers, we follow the scenic course taken by



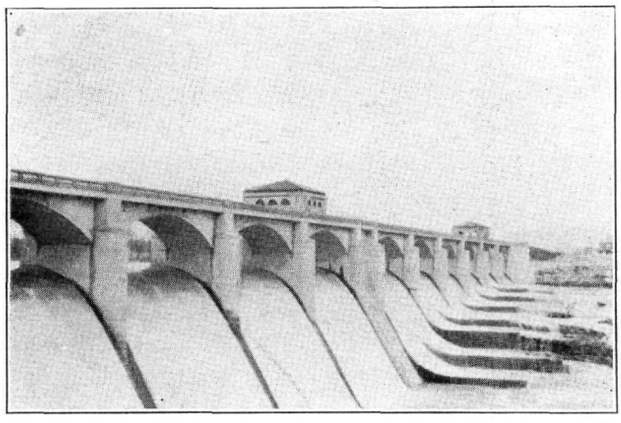


Photo by J. M. Weed

O'SHAUGHNESSY DAM

Route 257 for four miles to the O'Shaughnessy Dam.

O'Shaughnessy Dam

The O'Shaughnessy Dam, named after Jerry O'Shaughnessy who was for many years the waterworks superintendent, is newer and larger than the Griggs Dam. Contract price of the dam was $2,200,000, about three times that of the Griggs Dam. It provides a reservoir of 5,100,000,000 gallons capacity and 829 acres of water surface so, of course, quite an area of land had to be purchased when construction started in 1922. It was finished in 1925. The reservoir is eight miles long with an average width of 855 ft., an average depth of 19.8 ft., and a maximum depth at the dam of 69 ft. The concrete dam is 879 ft. long—1750 ft. with the earth approaches.

The dam itself is built on a large scale but the bridge, gracefully arched across the smooth flowing water, enhances its magnificence—especially so at this time of year when the water is high. Evenly spaced on the bridge surmounting the dam are three concrete houses. The middle house contains the controls for the gate which is regulated to store up water in wet seasons and to maintain the river below during dry. The west house is for the power house gate which will be employed in the future if and when the head the dam has developed in the Scioto River is utilized. The east house is for decorative purposes only, adding balance to the bridge. At the foot of the ogee type spillway are huge steps descending from each side to water level in the middle of the stream. Even as the Niagara, the view on the side is different and better, so crossing over the bridge we pause a moment before returning to Columbus.

Marble Cliff Quarries

Traveling south for eleven miles on Dublin Road we approach the largest limestone quarry in Ohio, the Marble Cliff Quarries. After all's said and done it's just a hole in the ground; but one of the largest of its kind in the United States. Visitors are welcome at all times but since the office is closed on Sundays it will be necessary to have a permit on that day. The entrance to the quarry is on Trabue Road.

Chief products are chemical stone and road stone. Chemical stone is limestone which is used by the chemical industries. Road stone is limestone which has been crushed and graded at the quarries and is used for roads, for railroad ballast, and for concrete. It was Marble Cliff road stone that was used for the concrete in The Ohio State University Stadium.

Battelle Memorial Institute

Driving in an easterly direction on Trabue Road, Cambridge Boulevard, and King Avenue, we come to a spacious, red brick building with an impressive facade, which houses the Battelle Memorial Institute. The Institute is open to visitors every day except Saturday afternoons and Sundays and visitors are given excellent guidance throughout the various departments.

The technical staff consists of nine departments: alloys and steels, metallography, ores, physics, electroplating, chemistry, ceramics, machine shop, and fuels. Perhaps the most important is the department of alloys and steels. Equipment of the Institute is very extensive. Facilities, which at the present time are being augmented by a new building, include a foundry, machine shop, carpenter shop, and a library of 5,000 books and bound periodicals of a technical nature.

Founded in 1928 by Gordon Battelle and his mother, Annie Norton Battelle, the Institute has conducted experiments of its own by means of its endowment and has done much research for industry to which its services, conducted on a non-profit basis, are available. Many developments of industrial importance have resulted from the Institute's research.

Upon leaving we realize that this is no false front—that the stately columns at the entrance are entirely in keeping with the important work taking place inside. Above the door is inscribed, "Original Research Is Mankind's Most Powerful Weapon In Solving the Problems of Nature."

Across the flats, looming, is seen the Stadium. Let us hope that at the completion of your afternoon's drive, you have had a breath of fresh air, a little relaxation, and a bit of inspiration.

DUBLIN BRIDGE

Photo by J. M. Weed